



3rd World Conference on Psychology, Counselling and Guidance (WPCPG-2012)

# The Efficiency of Applying a Cognitive Behavioral Therapy Program in Diminishing Perfectionism, Irrational Beliefs and Teenagers' Stress

Barbara Craciun<sup>a \*</sup><sup>a</sup> Faculty of Psychology and Educational Sciences, Bucharest University, Sos. Panduri nr. 90, sector 5, Bucharest, 050656, Romania

---

## Abstract

Cognitive-behavioral techniques are successfully used for modifying children's and teenagers' unmatched behavior. Their cognitive, affective and behavioral development involves a series of limits in applying these therapeutic techniques. However, cognitive behavioral programs show their efficiency through the method of learning adapted behaviors which interfere by yielding the cognitions and behavior of children and teenagers. The purpose of this study is to investigate the efficiency of applying a cognitive-behavioral therapy program for decreasing the level of perfectionism tendencies, irrational beliefs and teenagers' stress. Results showed that cognitive behavioral therapy program was efficient in diminishing perfectionism, irrational beliefs and stress.

© 2013 The Authors. Published by Elsevier Ltd. Open access under [CC BY-NC-ND license](http://creativecommons.org/licenses/by-nc-nd/4.0/).

Selection and peer-review under responsibility of Prof. Dr. Huseyin Uzunboylu &amp; Dr. Mukaddes Demirok, Near East University, Cyprus

*Keywords: irrational beliefs, stress, cognitive behavioral techniques, teenagers;*

---

## 1. Introduction

Perfectionism is defined as a pathological personality attribute, an "execution tendency of trying to be excessively perfect" (Schiopu, 1997). This attribute is mostly neurotic, but it may lead to obsession. According to Freud (1932), the need of perfection results from narcissistic and masochistic impulses, and mostly from destructive impulses. At the same time it can be considered as a left-over of the Oedipian complex, if there are any internal images of the parents and the interdictions given by them, which might be followed. Freud thinks that individuals who are obsessed with the need of perfection suffocate under the restrictions' weight and manifest an amount of aggressiveness pointed towards them.

## 2. Perfectionism, irrational beliefs and stress

Perfectionism is more than a compulsive desire, sometimes it might be a destructive wish of obtaining perfection. We must distinguish between normal and neurotic perfectionism (Hamachek, 1978). Normal perfectionists develop the desire of reaching perfection being motivated by success and accomplishment while neurotic perfectionists are mostly driven by the fear of failure. Hamachek describes the in-satisfaction feeling accompanied by anxiety,

---

\* Corresponding author name. Tel.: +0040-0721-261-281

E-mail address: [barbaracraciun@yahoo.com](mailto:barbaracraciun@yahoo.com)

confusion, emotional breakdown, feelings of contempt and guilt and also de-valorizing which separates the neurotic perfectionism from the normal one. Perfectionism is a personality feature, such as a certain cognitive style corresponds to a certain type of behavior. Research has shown that perfectionism is considered today a multidimensional concept (Frost, Marten, Lahart & Rosenblate, 1990; Hewitt, Flett, 1993).

The opinions of researchers are pointed to positive aspects of perfectionism that might be qualified as normality at some point. The data resulted from surveys shows us a high prevalence of perfectionism in the general population (Burns, 1980). In its positive, normal version, perfectionism provides the necessary energy to obtain success and accomplishment being characterized by high attention to details, meticulousity and sustained involvement in activity.

On the other hand, several authors consider perfectionism to be an invisible face of a deeper suffering that needs to be carried out (Portelance, 1994). Studies have shown a series of causes that can generate the acquisition of perfectionist schemes among children and afterwards at teenagers: family environment where love and approval are conditioned by performance; the child rarely received positive encouragement for his behavior and always tries to do more to gain these re-enforcements; perfectionist parents who become models for their own children; parents consider a child to be preferred as long as they can project over him their own unsatisfied megalomaniac phantasms (Horney, 1937).

Other studies have shown the connection between perfectionism and depressive symptoms at children and teenagers (Einstein, Lovibond, & Gaston, 2000). Also there have been identified several aspects of perfectionism and lack of hope among teenagers (Donaldson, Spirito, & Farnett, 2000).

In a study developed with 114 children and teenagers in the year 2000, authors have shown that socially prescribed perfectionism is correlated to depression, anxiety, social stress, anger-suppression and outwardly directed anger (Hewitt, Caelian, Flett, Sherry, Collins & Flynn, 2002). Flett, Hewitt, Demerjian, Sturman, Sherry and, Cheng have shown in 2011 in a study with psychometric valences that frequent perfectionist thoughts increase the stress level at teenagers.

Stress represents a normal and useful aspect of life, aspect which can generate temporary discomfort in several situations. Stress might induce long-term consequences. Stress is perceived as a state of tension and discomfort. The reaction to stressful situations and stress itself will always be the results of subjective perceptions that are psychologically determined.

Evaluating whether situations are stressful or not, the difference between two points of view is made, depending on the person's view, their idea of life, their experience. Vulnerability to stress is accepted as a feature common to certain people of casually reacting to a large range of stressful agents through psychological stress. Teen-agers are more and more confronted with the issue of stress in the present social environment.

A series of studies have identified the connection between stress, perfectionism and suicidal ideation at teenagers (Chang, 2000). Others assert that maladaptive dimensions of perfectionism have a positive relation with stress (Chang, Watkin & Banks, 2004). Perfectionist thoughts contribute to levels of psychological distress (Flett, Madorsky, Hewitt & Heise, 2004).

According to Ellis' theory (Ellis & Dryden, 1997), emotional disorders are founded on the tendency of the individual to make absolutist and rigid evaluation of the events they perceive. These evaluations are often verbalized by saying "I necessary must", "it is mandatory", "it is absolutely necessary".

These absolutist central cognitions generate afterwards a core of irrational beliefs. These are: the absolutist and rigid evaluations of the individuals related to the perceived events, catastrophic beliefs, low tolerance to frustration, depreciation and global evaluation. Irrational beliefs generate negative and unmatched emotions.

They are irrational because they are rigid and block reaching one's goals. After the year 1990, more studies made on teenagers have shown, for example, a connection between cognitive distortions, irrational beliefs and depressive symptoms (Garber & Flynn, 2001).

Other theoretical approaches followed by applicative research have shown results referring to the way parents may influence their children and teenagers in relation to their irrational beliefs. Thus the hypothesis of inferential negative feedback might produce negative self-attribution of the teenager and guilt for negative events (Fincham & Cain, 1986; Alloy et al., 1992; Garber & Flynn, 2001).

Intergenerational similarities have also been investigated in relation to perfectionism, anxious cognitions and fear of failure showing the way children and teenagers absorb these schemes from their parents (Soenens et al., 2005).

In this study the cognitive-behavioral psychotherapy intervention will start by identifying and confronting the irrational beliefs that the teenagers own. However it seems that a part of these irrational beliefs are related to perfectionist behavior. At the same time we may suggest that both interact with a certain level of stress.

The weight of literature also supported the idea that cognitive-behavioral therapeutic intervention stakes on demystifying the value system of the subject affected by (pathologic) perfectionism by placing in a contrast balance these values and the authentic and positive ones that definitely belong to normal perfectionism.

The present research was conducted to explore the efficiency of cognitive behavioral therapy interventions in diminishing perfectionist tendencies, irrational beliefs and stress among teenagers.

## *2.1. Method, participants and procedure*

The participants of this study were 124 teenagers students, the mean age was 16.21 (SD= 4.12) range 15-17 years. All participants have been divided into three groups: one experimental group which included 42 students (22 boys and 20 girls); one placebo group of 42 students (25 boys and 17 girls) and the control group which included 40 students (21 boys and 19 girls).

All participants have completed pre and post applying the cognitive behavioral therapy program a series of questionnaires: the Perfectionism subscale of the dysfunctional attitude scale (DAS; Weissman & Beck, 1978), The Perceived Stress Scale (PSS; Cohen, Kamarck, & Mermelstein, 1983) and The Child and Adolescent Scale of Irrationality (Bernard and Cronan, 1999). The data was analyzed with SPSS version 15.0. The statistical analysis of the questionnaire data used t-test to compare the level of perfectionism, irrational beliefs and the level of stress. The scores of the three groups were compared by ANOVA.

### *2.1.1. Measures*

The applied questionnaires were the following: the Perfectionism subscale of the dysfunctional attitude scale (DAS; Weissman & Beck, 1978). The Dysfunctional Attitudes Scale (DAS) is a self-report rating scale that assesses beliefs associated with vulnerability for depression. The perfectionism subscale was recently identified in a factor analysis of the DAS within the TADS sample (Rogers et al., 2009). The subscale consists of 15 items. Possible scores on the perfectionism factor range from 15 to 105, with higher scores representing greater perfectionism.

The Perceived Stress Scale (PSS; Cohen, Kamarck, & Mermelstein, 1983) is a 14-item global measure of self-appraised stress. Respondents are asked to rate the extent of agreement with these items across a 5-point Likert-type scale ranging from 0 (never) to 4 (very often).

Higher scores reflect elevated levels of stress. Test-retest reliability and construct validity have been shown to be acceptable (Cohen et al., 1983; Cohen & Williamson, 1988). The scale range is from 0 to 56. Cronbach's alpha for the present sample was .81.

The Child and Adolescent Scale of Irrationality (Bernard and Cronan, 1999). The scale was developed to measure irrational beliefs in children and adolescents 10 -18 years of age. The scale consists of 28 items. The answers are given on a five-point Lickerts scales. Cronbach's alpha ranging between .65 and .85.

## *2.2. The cognitive- behavioral intervention*

The method applied in the experimental group (n=42) has been mostly centered on modifying the particular thinking style of each participant. This modification was focused on the teenager's orientation to becoming conscious of the distorted and erroneous character of his irrational beliefs.

The cognitive - behavioral strategies were applying according to the following scheme:

a) Taking distance from problematic situations by self-observing and self-acceptance, which allowed teenagers to

adopt more objective points of view on their own thinking processes; b) looking for alternative solutions to make the subject find rational explanations facing negative events; c) making new social contacts; d) identifying emotions, thoughts and behaviors; e) working with self-esteem; f) learning and using assertiveness technique.

The program was interactive and was built on 15 weekly sessions, each session lasting for two hours. The intervention program used for the teenagers was moderated by two cognitive – behavioral therapists.

During the first three sessions, the group activities included exercises of knowing each other and self-exploring. Also, the teenagers worked with the ABC model, learning how to identify their own negative irrational thoughts and how to replace them with positive thinking using the balance technique.

The next five meetings were centered on self – acceptance. The themes were the following: „Meeting myself as I am”, „How to feel better with myself”, „The others accept me as I am”, „Perfect at home and at school”, „Allow being myself”.

The following sessions included intervention set on understanding the connection between emotions, thoughts and behavior, based on themes such as „How to change what I think”, „Emotions belong to me”, „How to behave with my colleagues”, „I am afraid, what should I do”. The final sessions were reserved for practicing assertiveness, understanding this concept and using such techniques at home, at school and in the peer group. Also, relaxation techniques were used, students receiving suggestions of Ego strengthening and increasing self-trust.

The method used in the placebo group (n=42) consisted in lessons lead by the school counselor with the following themes: modern society, society and IT technology, notions of work field and choosing a profession, expectation of finding a workplace, technological changes in everyday life (internet and social networks).

In the control group (n=40), no intervention program was used.

### 3. Results

The distribution was normal. Data were analyzed using parametric statistics. Pre – post test comparisons were completed with paired sample t-test. Perfectionism level reported significant results for the global score in the experimental group, where means decreased from pre to post test. There was registered significantly lower perfectionism post test compared to the placebo group ( $t=4.43$ ;  $p=.003$ ) and control group ( $t=2.84$ ;  $p=.002$ ).

For the global score of irrationality (irrational beliefs) in the experimental group and the placebo groups a significant difference has been registered ( $t=4.57$ ;  $p=.001$ ). The results post applying cognitive-behavioral therapy program have shown [M exp post 63.04; SD exp post =14.37] and [M placebo post 70.55; SD placebo post= 15.26]. The control group showed similar levels from pre to post test in case of score of irrationality [M exp control 72.64; SD control pre =15.65] and [M control post 70.55; SD control post= 15.26].

Significant differences were also recorded in the case of stress in the experimental group, posttest where means decreased from pre to post test ( $t=4.11$ ;  $p=.004$ ). The scores of the three groups were compared by ANOVA. Perfectionism showed significant results for the F test(2, 31)=6.82,  $p=.002$  and non-significant for pretest  $F(2,33)=5.56$ ,  $p=.01$ . Regarding irrationality,  $F(2, 43)=4.74$ ,  $p=.01$ ) the results were statistically significant in posttest, where experimental group differed from the placebo and the control group, means decreased after applying CBT intervention program.

### 4. Discussion and conclusion

These results support the efficiency of applying a cognitive behavioral therapy program for decreasing the level of perfectionism tendencies, irrational beliefs and teenage stress. We consider that cognitive-behavioral strategies applied during the intervention program lead to a change in the negative ideation of the students. This change was possible when each participant worked with their perfectionism and irrational beliefs, starting by self-observation and continuing with activities of self-acceptance. The cognitive behavioral intervention program targeted changing the students' behavior also by offering positive or negative feedback. Teenagers understood the importance of this strategy and the fact that they communicated lead, in our opinion, to an improved perception of their self-image. A limit of this study was the fact that we did not explore deeper the level of their self-esteem by

using adequate tools. Another limit is the low number of subjects and the fact that the results obtained in this study require testing on different age segments (children and teenagers aged 10-14) to check their strength. If these investigations would use a similar design, they would benefit from positive results and such cognitive-behavioral programs would successfully be used in the educational field.

## References

- Alloy, L. B., Lipman, A. J., & Abramson, L. Y. (1992). Attributional style as a vulnerability factor for depression: Validation by past history of mood disorders. *Cognitive Therapy and Research*, 16, 391–407.
- Bernard, M.E. & Cronan, F. (1999). The Child and Adolescent Scale of Irrationality: Validation Data and Mental Health Correlates. *Journal of Cognitive Psychotherapy*, Volume 13, Number 2, pp. 121-132(12).
- Burns, D.D. (1980). The perfectionist's script for self-defeat. *Psychology Today*, November, 34-51.
- Chang, E.C. (2000). Perfectionism as a predictor of positive and negative psychological outcomes: Examining a mediational model in younger and older adults. *Journal of Counseling Psychology*, 47, 18-26.
- Chang, E. C., Watkins, A. F., & Banks, K. H. (2004). How adaptive and maladaptive perfectionism related to positive and negative psychological functioning: Testing a stress-mediation model in black and white female college students. *Journal of Counseling Psychology*, 51(1), 93–102.
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24, 385-396.
- Donaldson, D., Spirito, A., Farnett, E. (2000). The role of perfectionism and depressive cognitions in understanding the hopelessness experienced by adolescent suicide attempters. *Child Psychiatry Hum Dev*. Winter; 31(2):99-111.
- Einstein, D. A., Lovibond, P. F., & Gaston, J. E. (2001). Relationship between perfectionism and emotional symptoms in an adolescent sample. *Australian Journal of Psychology*, 52, 89-93.
- Ellis A, Dryden W. (1997). *The practice of rational emotive behavior therapy* (2nd ed.). New York: Springer.
- Fincham, F. D., & Cain, K. M. (1986). Learned helplessness in humans: A developmental analysis. *Developmental Review*, 6, 301–333.
- Flett, G.L., Madorsky, D., Hewitt, P.L., & Heisel, J.M. (2004). Perfectionism Cognitions, Rumination, and Psychological Distress. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 20, 0894-9085.
- Flett, G.L., Hewitt, P.L., Demerjian, A., Sturman, E.D., Sherry, S.B. & Cheng, W. (2011). Perfectionistic Automatic Thoughts and Psychological Distress in Adolescents: An Analysis of the Perfectionism Cognitions Inventory. *Journal Rational-Emotive Cognitive-Behavioral Therapy*, 10942-011-0131-7. Published online 23 March.
- Freud, S., (1932). *Nouvelles conférences sur la psychanalyse*, trad. Anne Berman, Ed. Gallimard.
- Frost, R.O., Marten, P., Lahart, C., & Rosenblate, R. (1990). The dimensions of perfectionism. *Cognitive Therapy and Research*, 14, 449-468.
- Hamachek, D. E. (1978). Psychodynamics of normal and neurotic perfectionism. *Psychology*, 15, 27–33.
- Garber, J., & Flynn, C. (2001). Predictors of depressive cognitions in young adolescents. *Cognitive Therapy and Research*, 25, 353–376.
- Hewitt, P.L., Caelian, C.F., Flett, G.L., Sherry, S.B., Collins, L., & Flynn, C.A. (2002). Perfectionism in children: associations with depression, anxiety and anger. *Personality and Individual Differences*, 32, 1049-1061.
- Horney, K. (1937). *The neurotic personality of our time*. New York: Norton & Co.
- Portelance, C. (1994). La peur de décevoir. *Psychologies*, 123, 46-47.
- Rogers, G., Essex, M., Park, J., Klein, M., Curry, J.F., Feeny, N., et al. (2009). The Dysfunctional Attitudes Scale: Psychometric properties in depressed adolescents. *Journal of Clinical & Adolescent Psychology*. 38:781–789.
- Soenens, B., Elliot, A. J., Goossens, L., Vansteenkiste, M., Luyten, P. & Duriez, B. (2005). The intergenerational transmission of perfectionism: Parents' psychological control as an intervening variable. *Journal of Family Psychology*, Vol. 19, Issue 3, 358-366.
- Schiopu, U. (1997). *Dictionar de psihologie*. Editura Babel, București.
- Weismann, A.N & Beck, A.T. (1978). Development and validation of the dysfunctional attitude scale: A preliminary investigation. Paper presented at the 50<sup>th</sup> Annual Meeting of the American Educational Research Association, Toronto, Ontario.